ABSTRACT OF THE DISCLOSURE

[70] Certain embodiments include a method and system for measuring and imaging local lung function. The method includes triggering an image scan of at least a lung cross-section of a patient, scanning the lung cross-section during at least one of an inspiration and an expiration of air by the patient to obtain lung image data and measuring a lung function during at least one of an inspiration and an expiration of air by the patient to obtain lung function data. The method may also include performing a preview scan of the patient to identify the lung cross-section for imaging. Additionally, the lung image data and lung function data may be combined for use in diagnosis of the patient. The lung image data and lung function data may also be output. The method may further include processing the lung function data to generate a plot of lung attenuation versus time.